



# Fort Detrick Wastewater Program



Be aware: Anything you dump down the drain will end up at the Fort Detrick Wastewater Treatment Plant. Treated water is discharged into the Monocacy River and ultimately ends up in the Chesapeake Bay.



# Regulations and Permits



- Fort Detrick Regulation 200-7  
Non-Domestic Wastewater Control.
- Discharge Permit for Wastewater Treatment Plant.
- Sewage Sludge Utilization Permit.
- Municipal Landfill Refuse Disposal Permit.



# Fort Detrick Regulation 200-7 Non-Domestic Wastewater Control



## Prohibited Discharges

No one shall discharge any prohibited waste into the sanitary sewer system that causes disruption of the wastewater treatment processes.  
Discharge standards are contained within Fort Detrick Regulation 200-7.



# Fort Detrick Regulation 200-7 Non-Domestic Wastewater Control



## Standard Conditions:

- **Pretreatment of Laboratory Discharges:** All wastewater discharges from biosafety level 1 through 4 facilities must be decontaminated (pretreated) prior to disposal into the sanitary sewer system.
- **By-pass of pretreatment facilities:** By-pass is prohibited unless it is unavoidable to prevent loss of life, personal injury, severe property damage, or no feasible alternative exists.



# Fort Detrick Regulation 200-7 Non-Domestic Wastewater Control



## Standard Conditions:

- **Dilution to meet standards:** Dilution to meet discharge standard limitations is prohibited.
- **Floor drains:** No bulk storage of hazardous substance or petroleum products near floor drains. All floor drains should be connected to the sanitary sewer system.



# Fort Detrick Regulation 200-7 Non-Domestic Wastewater Control



## Standard Conditions:

- **New users:** Any new industrial discharges to the sanitary sewer system or users with a significant addition to their discharge must submit a New User Discharge Authorization (FD form 1418) at least 180 days prior to anticipated discharge.
- **Notification of changed discharge:** All users must notify the SEIPO in advance of any discharge which causes a change in quantity or quality of the average daily discharge to the sanitary sewer system. A Request for Sewer Discharge (FD form 1417) must be submitted prior to discharge.



# Discharge Permit for Wastewater Treatment Plant



- Permit contains effluent limitations, monitoring and reporting requirements and general operating conditions.
- Contamination limitations of treated water and monitoring frequencies are detailed in the permit.
- Effective date of permit is 01 July 2004 with an expiration date of 30 June 2009.





# Radiological Discharge Limitations



- Fort Detrick has established a zero tolerance for radiological waste discharges. Radiological wastes are prohibited from being discharged into the sanitary sewer system.



# Future Wastewater Limitations



- Future growth at Fort Detrick will increase sanitary flows above current wastewater flows of approx. 1.0 mgd.
- Future regulations will reduce allowable nutrient discharges into the Monocacy River. The existing WWTP will not be able to treat the sanitary waste to proposed levels.
- Future WWTP upgrades and expansion costs could be in excess of \$15 million dollars.



## Example of Prohibited Discharge



- In August 2005 approximately 3,000 gallons of diluted propylene glycol was discharged into the sanitary sewer system during cooling tower maintenance.
- The propylene glycol was mistakenly discharged to the laboratory system which thermally treats wastes at the Steam Sterilization Plant prior to discharge to the sanitary sewer system.
- The chemical acrolein was produced as an oxidation byproduct of propylene glycol during the thermal treatment process.



## Example of Prohibited Discharge



- Acrolein is used as a biocide to control organic growth within the water. WWTP processes rely on biological methods for treatment of sanitary wastes.
- The acrolein wiped-out (killed) all organic growth at the WWTP impacting treatment processes and causing effluent above allowable limitations to discharge into the Monocacy River.
- An Army investigation (AR 15-6) was conducted into the cause of the incident.



# Your Responsibilities



- Make sure that all non-domestic wastewater discharges are in compliance with FD Regulation 200-7.
- Make sure radiological wastes are not discharged into the sanitary sewer system.
- Review your operational activities for non-domestic wastewater discharges that have not been approved.



# “Ask First”



Contact the Environmental Management Office if there is any question as to what can be disposed in the sanitary sewer system.